



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,127	11/08/2006	Stephan Haser	100341.56596US	4068
23911	7590	06/24/2009	EXAMINER	
CROWELL & MORING LLP			GEBRESEILASSIE, KIBROM K	
INTELLECTUAL PROPERTY GROUP			ART UNIT	PAPER NUMBER
P.O. BOX 14300			2128	
WASHINGTON, DC 20044-4300				
MAIL DATE		DELIVERY MODE		
06/24/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary		Application No.	Applicant(s)
		10/551,127	HASER ET AL.
Examiner		Art Unit	
	KIBROM K. GEBRESILASSIE	2128	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 26 September 2005.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 3-5 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 3-5 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 26 September 2005 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-166/08)
 Paper No(s)/Mail Date 09/26/2005

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____

5) Notice of Informal Patent Application

6) Other: _____

DETAILED ACTION

1. This communication is responsive to the preliminary amendment filed on 09/26/2005.
2. Claims 1 and 2 have been canceled.
3. New Claims 3-5 have been added.

Response to Amendment

4. Applicant's preliminary amendment to specification, abstract and claims are considered and are entered.

Priority

5. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d).

Information Disclosure Statement

6. The information disclosure statement filed on 09/26/2005 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document (such as WO01/81979, DE421008, DE19917314, and EP0880046). It has been placed in the application file, but the information referred to therein has not been considered.

Specification

7. The abstract of the disclosure is objected to because on line 5 recites "fr", which is misspelled. Correction is required. See MPEP § 608.01(b).

Drawings

8. Figures 1-3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).
9. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because Figure 5 is not mentioned in the specification.
10. Figs. 4 and 5 are objected because blocks are not properly labeled with element numbers.

Claim Objections

11. Claims 3 and 4 are objected to because of the following informalities: claim steps are not separated by semicolons. Appropriate correction is required.

Claim Rejections - 35 USC § 112

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
13. Claims 3-5 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: the "calculating" steps are nothing to do with the "creating" steps. There is no any structural connection between "calculating" and "creating basic design", or "creating standard design", or "creating final standard designs". The "calculating" steps have no effect on the "creating" steps and are therefore missing the necessary structural connections.

Further, the same rejection would apply to Claim 4. Claim 4 is also missing the necessary structural connections between the steps.

14. Claims 3-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. Claim 1 recites "basic design", "standard design", and "final standard designs". The "basic design" is created based on theoretical specification, then the "standard design" is created based on basic design. However, it is unclear how the "standard design" differs from the "basic design" based on the claimed language.
- b. Claim 1 recites "creating final standard designs for production". This limitation stands by itself without having any connection from the rest of the steps. It is unclear how the "final standard" is created.
- c. What is the difference between "individual progressive lenses" (line 6) and "individual lenses" (line 9)?
- d. What is the distinction between the steps of "calculating individual progressive lenses" and "calculating individual lenses"? These two steps are calculated from the starting designs according to individual data and therefore they have similar outputs. Further, these two steps seem to have no effect on the creating steps.
- e. There is insufficient antecedent basis for the limitation of "the starting designs" (Claim 1 line 6).
- f. There is insufficient antecedent basis for the limitation of "the atoric superimposed surface" (Claim 4 line 9). Is there any relationship between the

step of "calculating a toric superimposed surface" (line 8) and the step of "converting the atoric superimposed surface"? For purpose of examination, examiner interpreted the limitation of "calculating a toric superimposed surface" as "calculating atoric superimposed surface".

Regarding - 35 USC § 101

15. "Process claims 3-5 were also analyzed under 35 USC 101. It is recognized that, in order to be statutory, a process claim must be 1) tied to a particular machine or apparatus, or 2) it transforms a particular article into a different state or thing. *In re Bilski*, 88 USPQ2d 1385 (2008). It is also recognized that a general purpose computer may be converted into a particular computer through the operation of software on the computer. *In re Alappat*, 31 USPQ2d 1545 (1994). For the instant invention, the specification makes clear that the calculating process is carried out via optimization program operating on a computer (See: PG-PUB, par [0066]). As such, the process is tied to a particular machine, thus meeting the *Bilski* test. "

Claim Interpretation

16. Claim 4 recites "calculating a toric superimposed surface" (line 8). In light of applicants specification and Fig. 5, examiner interpreted as "calculating atoric superimposed surface" to be consistent with the next step of "converting" (line 9).

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

18. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6, 712, 467 issued to Kitani et al in view of applicants own admission (herein referred as AOA).

g. Claims 1 and 2. (Cancelled)

h. Claim 3, Kitani et al discloses a method for calculating an individual progressive lens comprising:
creating standard designs from the at least one basic design (such as...*predetermined specific power is determined and design-related data is designated as design input data...*; see: Col. 13 lines 13-16),
calculating individual progressive lenses from the starting designs, corresponding to individual data for wearing test subjects (such as...*input data, the spherical form of the lens is determined, and the optical characteristics of that lens is computed....*; See: Col. 13 lines 13-17),

creating final standard designs for production (such as...once the order for progressive power lens of the prescription has been made, processing data is created...; See: Col. 16 lines 32-41), and

calculating individual lenses from the starting designs according to individual data (such as...input data, the spherical form of the lens is determined, and the optical characteristics of that lens is computed....; See: Col. 13 lines 13-17).

Kitani et al discloses the preparation of prescription data and lens data for a spectacles wearer (See: Col. 14 lines 36-43). However, Kitani et al does not expressly disclose those prescription data and lens data are based on theoretical specifications, they are measured values.

AOA discloses creating at least one basic design for lenses based on theoretical specifications (such as....*basic design and/or number of basic design are created...in principle, such a basic design can be created by a method like that described in aforementioned WO 01/81979...; See: PG-PUB, par [0017]).*

It would have been obvious to one of ordinary skill in the art to modify the teaching of Kitani et al with the teaching of AOA because AOA discloses creating a basic design using known technique specified in prior art such as WO 01/81979. Therefore, it would have been obvious to one of ordinary skill in the art to modify the Kitani et al teaching to include to create a basic design based on theoretical specification. The motivation to do so would be to acquire basic

physical and design data before the manufacture of progressive lenses (Kitani et al).

19. Claims 4, and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6, 712, 467 issued to Kitani et al as applied to claim 1 above, and further in view of US Patent No. 5, 767, 939 issued to Komatsu et al.

i. Claim 4, Kitani et al discloses method as claimed in Claim 3, wherein the individual lenses are calculated from the starting designs according to individual data by selecting a starting surface from the starting design (See: Col. 12 lines 54-64),

replacing standard values by the individual data (such as...*optical model for a wear condition (i.e. individual data) is established...*; See: Col. 13 lines 30-32),

calculating an object distance and accommodation model (such as...*initial optical model for a wear condition is established based on distance of a predetermined near object...*; See: Col. 13 lines 30-37),

arranging the lens with respect to the eye according to the individual data (such as...*initial optical model for a wear condition is established based on...right and left eye positions...*; See: Col. 13 lines 30-37),

taking into account new lens parameters (such as...*physical lens data, prescription related data, and frame data...*; See: Col. 15 lines 56-65),

converting the atoric superimposed surface into an optimization spline (such as...*the candidate spherical form (i.e. atoric) of the lens is decided to be*

employed, whereby optimization is performed to decide surface form..; See: Col. 13 lines 42-46),

optimizing the individual lens (such as...the candidate spherical form (i.e. atoric) of the lens is decided to be employed, whereby optimization is performed to decide surface form..; See: Col. 13 lines 42-46), and

expanding the progressive area (such as...increasing/decreasing average curve value per se...; See: col. 13 lines 60-65).

Kitani et al does not expressly disclose calculating atoric superimposed surface or toric superimposed surface. However, the atoric superimposed surface or toric superimposed surfaces are inherent to optometry data such as spherical power, cylindrical power, cylinder axis, or prism base setting (See: Col. 14 lines 54-62) of Kitani et al.

Kitani et al does not expressly disclose calculating a new principal line of vision, interpolation and transformation of interporating and transforming setpoint specifications.

Komatsu et al discloses calculating a new principal line of vision (such as...*the contours of X and Y principal meridians may be determined independent of each other....; See: Col. 8 lines 31-32*), interpolation and transformation of interporating and transforming setpoint specifications (such as....*the shape of lens surface is calculated as coordinates of discrete points, and coordinates of intermediate points are given by the interpolation method....; See: Col. 4 lines 5-7*).

It would have been obvious to one of ordinary skill in the art to combine the teaching of Komatsu et al with the teaching of Kitani et al because both references drawn to a design process of progressive lens. The motivation to do so would be to improve the optical modeling properties by removing the aberration (Komatsu et al).

j. Claim 5, Kitani et al does not expressly disclose atoric superimposed surface or toric superimposed surface. However, the atoric superimposed surface or toric superimposed surfaces are inherent to optometry data such as spherical power, cylindrical power, cylinder axis, or prism base setting (See: Col. 14 lines 54-62) of Kitani et al.

20. **Support for Amendments and Newly Added Claims**, Applicants are respectfully requested, in the event of an amendment to claims or submission of new claims, that such claims and their limitations be directly mapped to the specification, which provides support for the subject matter. This will assist in expediting compact prosecution. MPEP 714.02 recites: "Applicant should also specifically point out the support for any amendments made to the disclosure. See MPEP § 2163.06. An amendment which does not comply with the provisions of 37 CFR 1.121(b), (c), (d), and (h) may be held not fully responsive. See MPEP § 714." Amendments not pointing to specific support in the disclosure may be deemed as not complying with provisions of 37 C.F.R. 1.131(b), (c), (d), and (h) and therefore held not fully responsive. Generic statements such as "Applicants believe no new matter has been introduced" may be deemed insufficient.

21. **Requests for Interview**, In accordance with 37 CFR 1.133(a)(3), requests for interview must be made in advance. Interview requests are to be made by telephone (571-272-8634) call or FAX (571-273-8634). Applicants must provide a detailed agenda as to what will be discussed (generic statement such as "discuss §102 rejection" or "discuss rejections of claims 1-3" may be denied interview). The detail agenda along with any proposed amendments is to be written on a PTOL-413A or a custom form and should be faxed (or emailed, subject to MPEP 713.01.I / MPEP 502.03) to the Examiner at least 3 days prior to the scheduled interview.

Interview requests submitted within amendments may be denied because the Examiner was not notified, in advance, of the Applicant Initiated Interview Request and due to time constraints may not be able to review the interview request to prior to the mailing of the next Office Action

Conclusion

22. All claims are rejected.
23. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KIBROM K. GEBRESILASSIE whose telephone number is (571)272-8571. The examiner can normally be reached on 8:00 am - 4:30 pm Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini S. Shah can be reached on 571-272-2279. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kamini S Shah/
Supervisory Patent Examiner, Art
Unit 2128

/Kibrom K Gebresilassie/
Examiner, Art Unit 2128